What is claimed is:

1. A process for producing glass fiber comprising

heating and rotating a hollow cylinder-shaped rotating member having peripheral wall provided with orifices so as to rotate molten glass in the rotating member, and

ejecting the molten glass through orifices by centrifugal force to form glass fiber, characterized in

ejecting molten glass through at least two types of orifices arranged alternately in a circumferential direction of the rotating member, each of said two types of orifices having different diameter, so as to form at least two types of primary streams having different length,

introducing said primary streams into flame flow around the rotating member, said flame flow being ejected in a direction substantially parallel with a generatrix direction of an outer circumference of the peripheral wall, so as to fine said primary streams to form secondary fibers, and

ejecting compressed fluid in a direction at an acute angle relative to the flame flow including secondary fibers, to collide the secondary fibers with the compressed fluid.

2. The process for producing glass fiber according to claim 1, wherein the compressed fluid is ejected in an angle of 15-30 degree relative to the generatrix direction of the outer circumference of the peripheral wall of the rotating member.

3. The process for producing glass fiber according to claim 1, wherein a distance between a top edge of the compressed fluid and a bottom edge of the peripheral wall of the rotating member is at least 30 mm.

4. An apparatus for producing glass fiber comprising

a hollow cylinder-shaped rotating member having a peripheral wall alternately provided with at least two types of orifices each having different diameter in a circumferential direction of the peripheral wall,

a circular drawing burner concentrically arranged above and around the rotating member, and having an ejecting outlet opened in substantially parallel with a generatrix direction of an outer circumference of the peripheral wall, and

an ejecting nozzle around the drawing burner, said ejecting nozzle being concentrically arranged above and around the peripheral wall of the rotating member, and having an ejecting outlet opened in a direction at an acute angle relative to the generatrix direction of the outer circumference of the peripheral wall.

5. The apparatus for producing glass fiber according to claim 4, wherein

at least two types of orifices each having different diameter are alternately provided in the peripheral wall in the circumferential direction of the peripheral wall, to form a latitudinal row,

a plurality of longitudinal orifice rows are provide in the peripheral wall in the generatrix direction of the outer circumference of the peripheral wall, and

the orifice in a lowerside region has a diameter smaller than that of the corresponding orifice in an upper side region.

6. The apparatus for producing glass fiber according to claim 4, wherein

the peripheral wall is provided with larger orifices and smaller orifices,

the larger orifices are arranged in the generatrix direction of the outer circumference to form first bands group of orifices,

the smaller orifices are arranged in the generatrix direction of the outer circumference to form second bands group of orifices, and

the first bands group of orifices and the second bands group of orifices are arranged alternately in the circumferential direction of the peripheral wall of the rotating member.

7. The apparatus for producing glass fiber according to claim 6, wherein

the orifice arranged in a lowerside region has a diameter smaller than that of the orifice arranged in an upper side region in either the first bands group of orifices or the second bands group of orifices.

8. The apparatus for producing glass fiber according to any of claims 4-7,

wherein

a difference in the diameter between at least two types of orifices each having different diameter is in a range of from 0.02 to 0.3 mm.

Added A2